

PATENT ABSTRACTS OF JAPAN

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(21)Application number : **06-003474** (71)Applicant : **MATSUSHITA ELECTRIC IND CO LTD**

(22)Date of filing : **18.01.1994** (72)Inventor : **KITAJIMA FUMIHIDE**

(54) PORTABLE NAVIGATION DEVICE

(57)Abstract:

PURPOSE: To reduce the power consumption for display operation of a crystal display by providing small and large fluorescent tubes at the back-light part of the crystal display and also providing a selector switch for the fluorescent tubes and a back-light control part to control the illuminated light.

CONSTITUTION: The output voltage of a back-light control part 14 drives a large fluorescent tube 17 through a selector switch 13 to light up the entire screen of a crystal display 9. In this case, a small fluorescent tube 18 remains off. Under this state, when the switch 13 is switched over to the fluorescent tube 18 side, the fluorescent tube 17 is turned off, making the screen change to a limited screen. Also a mode terminal 27 is switched over simultaneously by the switch 13, and sets the display area of the display 9 at the total and limited areas through a CPU7. Like this, the screen of the display 9 can be changed from the total screen to limited one by the switch 13. Thus, when the display is operated on the limited screen, a power consumption for the display 9 can be reduced and also can be operated to display for a long period.

